

LISTING OF CLAIMS:

1. (Currently Amended) Method A method for determining the angular displacement (ϕ_o) of the an output shaft (24) of an impulse nut runner at tightening of a screw joint to a desired final torque level (T_f) , wherein the impulse nut runner includes an impulse unit (23) with a motor driven inertia drive member (27) delivering one torque impulse per full revolution relative to the output shaft (24) , and an angle sensing device $(35,38)$ arranged to detect the a rotational movement (ϕ_b) of the inertia drive member (27) , said method comprising the following steps:

defining a threshold torque level (T_t) from which the rotational movement (ϕ_b) of the inertia drive member (27) shall is to be detected,

determining the a total rotation angle (ϕ_{tot}) of the inertia drive member accomplished by the a total number of torque impulses (N_{tot}) counted from said threshold torque level (T_t) , and

calculating the a total angular movement (ϕ_{tot}) of the output shaft (24) accomplished by the total number of torque impulses (N_{tot}) counted from said threshold torque level (T_t) by reducing said determined total rotation angle (ϕ_{tot}) of the inertia drive member (27) counted from said threshold torque level (T_t) by the total angular movement (ϕ_{tot}) of said total number (N_{tot}) of full revolutions minus one full revolution, + $(N_{tot} - 1) \bullet 360^\circ$.

2. (Currently Amended) Method The method according to claim 1, wherein said threshold torque level (T_t) is a predetermined percentage of the desired final torque level (T_f) .